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PAINT '23

Proceedings of the 2nd ACM SIGPLAN International Workshop on

Programming Abstractions and Interactive Notations, Tools, and Environments

Edited by:

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Welcome from the Chairs

Programming environments that integrate tools, notations, and abstractions into a holistic user experience can provide programmers with better support for what they want to achieve. These programming environments can create an engaging place to do new forms of informational work—resulting in enjoyable, creative, and productive experiences with programming.

In the workshop on *Programming Abstractions and Interactive Notations, Tools, and Environments (PAINT)*, we want to discuss programming environments that support users in working with and creating notations and abstractions that matter to them. We are interested in the relationship between people centric notations and general-purpose programming languages and environments. How do we reflect the various experiences, needs, and priorities of the many people involved in programming—whether they call it that or not?

Areas of interest to PAINT-23included but were not limited to:

- Design and implementation of program representations and their means of interaction for end-users of all ages
- Design and implementation of visual programming environments
- Block-based environments and their application
- Projectional editors and their application
- Languages and their environments with mixed notations
- Meta tools or tool creation frameworks
- Methods to support working with abstractions, such as example-based programming
- Input as well as output devices for interacting with programming environments
- Theories of the above

PAINT-23welcomed two types of contributions:

• *Research papers* should present new, previously unpublished research in one or more of the topics described above.

• *Demos* show early implementations of novel and compelling tools, techniques, devices, and systems.

We received 14 submissions. Seven papers were accepted for publication and two for demonstration.

Participants meet in a hybrid format to present and discuss their work in sessions following the Writers' Workshop structure.

We would like to thank our program committee, all attendees of the workshop, and most importantly our authors for their contributions, constructive criticism, hard work, and willingness to share their ideas.

-Tom Beckmann, Robert Hirschfeld, Mauricio Verano Merino, and Juan Pablo Sáenz

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